

## UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO         | . 2                  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|------------------------|----------------------|-------------|----------------------|-------------------------|------------------|
| 10/659,708             |                      | 09/11/2003  | Brian Leyland-Jones  | 057491-0758             | 4750             |
| 22428                  | 7590                 | 09/22/2004  |                      | EXAMINER                |                  |
| FOLEY A                |                      | RDNER       | FAY, ZOHREH A        |                         |                  |
| SUITE 500<br>3000 K ST |                      | W           | ART UNIT             | PAPER NUMBER            |                  |
| WASHING                | WASHINGTON, DC 20007 |             |                      | 1614                    |                  |
|                        |                      |             |                      | DATE MAILED: 09/22/2004 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.   | Applicant(s)  |  |  |  |  |
|---|---|---|--|--|--|--|
| 055   | 10/659,708  | LEYLAND-JONES, BRIAN  |  |  |  |  |
| Office Action Summary   | Examiner  | Art Unit  |  |  |  |  |
|   | Zohreh Fay  | 1614  |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |   |   |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 66(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE. | nely filed s will be considered timely. the mailing date of this communication. |  |  |  |  |
| Status  |   |   |  |  |  |  |
| 1) Responsive to communication(s) filed on  | _•  |   |  |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) ☐ This  | action is noṇ-final.  |   |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |   |   |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |   |   |  |  |  |  |
| Disposition of Claims   |   | 1   |  |  |  |  |
| 4)⊠ Claim(s) <u>1-9</u> is/are pending in the application.  |   |   |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |   |   |  |  |  |  |
| 5) Claim(s) is/are allowed.   |   |   |  |  |  |  |
| 6)⊠ Claim(s) <u>1-9</u> is/are rejected.  |   |   |  |  |  |  |
| 7) Claim(s) is/are objected to.   |   |   |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or election requirement.   |   |   |  |  |  |  |
| Application Papers  |   |   |  |  |  |  |
| 9) The specification is objected to by the Examiner   |   |   |  |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  |   |   |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |   |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |   |   |  |  |  |  |
| 11) The oath or declaration is objected to by the Exa   | aminer. Note the attached Office  | Action or form PTO-152.   |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |   |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |   |   |  |  |  |  |
| a) All b) Some * c) None of:  |   |   |  |  |  |  |
| <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No.</li> </ol>  |   |   |  |  |  |  |
|   |   |   |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).   |   |   |  |  |  |  |
| * See the attached detailed Office action for a list o  |   | 1.  |  |  |  |  |
|   |   |   |  |  |  |  |
|   |   |   |  |  |  |  |
| Attachment(s)   |   |   |  |  |  |  |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)  |   |   |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152)  |   |   |  |  |  |  |
| Paper No(s)/Mail Date 6) Other:   |   |   |  |  |  |  |

Application/Control Number: 10/659,708

Art Unit: 1614

Claims 1-9 are presented for examination.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (Cancer Research 62,3550-35-37, June 15, 2002).

Lee at al. teach the use of insulin-like growth factor binding protein-3 for the inhibition of the growth of non-small cell lung cancer. The above reference suggests that IGFBP is a target for the treatment of lung cancer. See the entire abstract. The above reference also teaches the effectiveness of such compound in vivo and in-vitro. See the abstract, lines 21-23. Lee et al. differs from the claimed invention in the use of IGFB-3 in a patient with the conventional mode of administration. It would have been obvious for a person skilled in the art to employ a compound being successful in inducing apoptosis in lung cancer cells in-vivo and in-vitro and use it for clinical purposes, considering that the success in in-vitro and in-vivo experimental use is often an indicative of successful use in the patient population. One skilled in the art would have been motivated to employ the teaching of the above reference, since it relates to the use of the claimed compound as an agent which causes apoptosis and inhibits the growth of non-small cell lung cancer. The determination of different routes of administration is considered to be within the skill of the artisan. Applicant has presented

Art Unit: 1614

no evidence to establish the unexpected or unobvious nature of the claimed invention, and as such, claims 1-9 are properly rejected under 35 U.S.C. 103.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zohreh Fay whose telephone number is (571) 272-0573. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low can be reached on (571) 272-0951. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Z.F

